REMARKS

In the Notice of Non-Compliant Amendment dated Nov. 2, 2006 the Amendment filed Aug. 7, 2002 was alleged to be non-compliant for lacking status identifiers. The Applicant notes that when the Amendment was filed, back in August of 2002, the current status identifier system had not yet been introduced by the USPTO, as this system was enacted with an amendment to 37 C.F.R. 1.121 effective July 30, 2003. Accordingly, the Amendment was proper at the time it was filed.

However, to assist the Examiner, the Applicant has reformatted the claims portion of the Amendment to coincide with current procedures.

Reprint of Remarks of the Aug. 7, 2002 Amendment

This Amendment is filed in response to the Office action dated September 18, 2001. All objections and rejections are respectfully traversed.

Claims 1-25 are in the case. Applicant respectfully wishes to bring to the examiner's attention a Preliminary Amendment filed on January 8, 1999 in which claims 17-20 were added....

Claims 21-25 where added to better claim the invention.

At paragraph 5 of the Office action, claims 1-4, 6 and 9-16 were rejected under 35 U.S.C. 103 as being unpatentable over "Applicant's Admitted Prior Art," hereinafter referred to as AAPA, in view of either U.S. Patent 6,049,825 to Yamamoto, hereinafter referred to as Yamamoto, or U.S. Patent 6,188,759 to Lorenzen et al., hereinafter referred to as Lorenzen.

The invention as shown by representative claim 1 comprises in part:

> 1. In a data link switching (DLSw) network, a method for improving interaction between a first remote DLSw device coupled to a remote subnetwork including a switch having a forwarding table and a local DLSw de-

vice coupled to a local subnetwork including local end stations, the local DLSw device establishing a first logical peer connection with the first remote DLSw device in response to a failure of a second remote DLSw device, the method comprising the steps of:

at the first remote DLSw device, using configuration information to determine the local end stations that are reachable through the first logical DLSw peer connection;

generating one or more test frames at the first remote DLSw device, the test frames having source addresses comprising addresses of the reachable local end stations;

forwarding the test frames through the switch to force the switch to immediately update the forwarding table with (i) a port identifier (ID) of a port receiving the test frames at the switch and (ii) the source addresses of those frames.

Yamamoto discloses a method of switching from a first network adapter to a second network adapter to provide a first host with duplicated functionality for Transmission Control Protocol/Internet Protocol (TCP/IP) communications with a plurality of hosts including a second host over a network (see col. 5, 15-20). According to this method, when a fault of a first network adapter is detected, a first host disconnects the first network adapter and activates a second network adapter that clears its network table (see col. 7, line 59 through col. 8, line 5). The first host then extracts each node (second host) to which the host has established a TCP connection from its internal management table and sends control messages to the second hosts via the second network adapter which broadcasts an Address Resolution Protocol (ARP) request to the node associated with each control message (see col. 8, lines 6-23). On receipt of the ARP request, the second host recognizes that the address of the first host has changed and thus registers the new address to its own network table (see col. 8, lines 24-27). The second host then responds with an ARP response message to inform the first host of its MAC address (see col. 8, lines 28-30). Upon receipt of the ARP response message, the second network adapter registers the address information contained in the message to its network table and then transmits the control message to the second host using the registered address information (see col. 8, lines 31-36). The network adapter on the second host returns a response to the control message to the first host (see col. 8, lines 37-40). Communication between

the first host and second host can now resume through the second network adapter (see col. 8, 41-45).

Yamamoto further discloses a method of switching from a first network adapter to a second network adapter to provide a first host with duplicated functionality for TCP/IP communications with a plurality of other hosts including a second host over a network (see col. 5, lines 46-51). According to this method, a first host detects a failure with a first network adapter, disconnects the first network adapter, and activates a second network adapter (see col. 10, line 61 through col. 11, line 2). The first host then refers to its internal management table to find every node (second host) to which the first host has set up a TCP connection and sends an ARP response message, containing an IP address of the first host and a MAC address of the second network adapter, to a each of these second hosts via the second network adapter (see col. 11, lines 13-20). On receipt of the ARP response message, each second host, in turn, updates its network table entry concerning the first host by entering a correspondence between the first host's IP address and the second network adapter's MAC address (see col. 11, lines 20-24). The first host then resumes communication with the second host using the second network adapter (see col. 11, lines 25-28).

Lorenzen discloses a method of routing telecommunication signals in a telecommunications network that includes receiving a plurality of dynamic routing recommendations, making a determination to transfer telecommunication signals from a first switching element to a second switching element, optionally through one or more intermediate switching elements, and identifying one of the dynamic routing recommendations to perform the transfer (see col. 1, lines 42-51). The telecommunications signals are then transferred from the first switching element to the second switching element in response to the identified dynamic routing recommendation (see col. 1, lines 51-54).

AAPA discloses a network arrangement comprising a local data link switching (DLSw) device connected to a primary remote DLSw device and a backup remote DLSw device, and the primary and backup DLSw devices are connected to a switch. Moreover, a logical connection exists between the local DLSw device and the primary remote

DLSw device. (see Background of the Invention (BoI), p. 6, 1-15). When the primary remote DLSw device fails, the local DLSw device detects the failure, terminates the logical connection with the failed DLSw device and initiates a logical connection with the backup remote DLSw device (see BoI, p. 6, lines 26-29). The forwarding table entries in the switch eventually time-out or are flushed and the entries are updated by broadcasting frames destined for local end stations to all of the switch's ports. The backup remote DLSw delivers the frames to its local DLSw peer. When traffic from the local DLSw peer flows through the switch, the switch updates its forwarding table with the port identifier (ID) for the port connecting the backup remote DLSw device, along with the source medium access control (MAC) address of the incoming frame traffic at that port (see BoI, p. 7, lines 6-13). When the primary remote DLSw device comes back "on-line," the local DLSw device (i) recontacts the primary remote DLSw device, (ii) reinitiates a logical connection to that primary device, and (iii) terminates the logical connection with the backup remote DLSw device (see BoI, p. 7, lines 14-17).

Applicant respectfully urges that Yamamoto, Lorenzen, or AAPA either singly or combined do not disclose ***at the first remote DLSw device, using configuration information to determine the local end stations that are reachable through the first logical DLSw peer connection, generating one or more test frames at the first remote DLSw device, the test frames having source addresses comprising addresses of the reachable local end stations,*** and ***forwarding the test frames through the switch to force the switch to immediately update the forwarding table with (i) a port identifier (ID) of a port receiving the test frames at the switch and (ii) the source addresses of those frames***.

Applicant's novel claimed technique determines end stations that are reachable through a logical DLSw peer connection, generates one or more test frames, forwards the test frames through a switch to force the switch to immediately update its forwarding table with a port identifier (ID) of the port receiving the incoming test frames, along with the source addresses of those frames. If these latter source addresses are previously stored in the table, but associated with a different port ID, the test frames force the switch

to purge these previous table entries, thereby substantially reducing overall recovery time by eliminating the delay associated with "timing-out" previous, old entries of the table.

Yamamoto, Lorenzen and AAPA, on the other hand, do not teach applicant's claimed technique. Rather, Yamamoto discloses a method of ***switching from a first network adapter to a second network adapter to provide a first host with duplicated functionality for TCP/IP communications with a plurality of hosts***, Lorenzen discloses a ***method of routing telecommunication signals in a telecommunications network that includes receiving a plurality of dynamic routing recommendations, making a determination to transfer telecommunication signals from a first switching element to a second switching element, optionally through one or more intermediate switching elements, and identifying one of the dynamic routing recommendations to perform the transfer*** and AAPA discloses switching from a remote primary DLSw device to a remote backup DLSw device when the remote primary DLSw device fails.

Applicant respectfully urges that Yamamoto, Lorenzen, and AAPA are legally precluded from rendering the claimed invention obvious under 35 U.S.C. 103 because of the absence from the Yamamoto and Lorenzen patents and AAPA of applicant's ***at the first remote DLSw device, using configuration information to determine the local end stations that are reachable through the first logical DLSw peer connection, generating one or more test frames at the first remote DLSw device, the test frames having source addresses comprising addresses of the reachable local end stations*** and ***forwarding the test frames through the switch to force the switch to immediately update the forwarding table with (i) a port identifier (ID) of a port receiving the test frames at the switch and (ii) the source addresses of those frames.***

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent on allowable independent claims and therefore believed to be in condition for allowance.

Favorable action is respectfully solicited.

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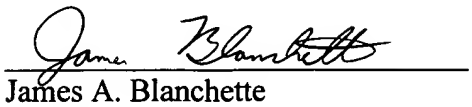
Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,



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